The Interface

PSYCHIATRIC DISORDERS: A Global Look at Facts and Figures

by Randy A. Sansone, MD, and Lori A. Sansone, MD

Psychiatry (Edgemont). 2010;7(12):16–19

This ongoing column is dedicated to the challenging clinical interface between psychiatry and primary care—two fields that are inexorably linked.

ABSTRACT

According to data from Western countries, psychiatric disorders are relatively prevalent. For example, in the United States general population, data from the National Comorbidity Survey Replication study indicate that about one-quarter of individuals experience a psychiatric disorder in a given year, with lifetime rates at about 50 percent. For both prevalence designations, anxiety disorders are most common. According to data from the European Study of the Epidemiology of Mental Disorders, the 12-month and lifetime-prevalence rates for psychiatric disorders among European general populations are 11.5 and 25.9 percent, respectively, with mood and anxiety disorders evidencing approximately equal rates. As expected, in primary care settings, the prevalence of psychiatric disorders in the United States and Europe is high, with point-prevalence rates varying, but affecting approximately 25 to 30 percent of patients. In primary care settings, the most common psychiatric diagnoses are mood and anxiety disorders as well as somatoform disorders. While no global summary of cost of care is available, the high prevalence rates of psychiatric disorders correspond with high expenditures for mental healthcare, as evidenced by a number of sources. Given these latter findings, prevention becomes all the more relevant in terms of cost management

KEY WORDS

Psychiatric disorders, prevalence rates, mental healthcare costs, disability

INTRODUCTION

In this edition of The Interface, we review a number of facts and figures as they relate to psychiatric diagnoses and cost of care. We begin by reviewing United States and European prevalence rates for psychiatric disorders in community and primary care populations. Then, given the identified high prevalence rates for these disorders, we present data related to the cost of mental healthcare, including the prevalence of disability for psychiatric disorders in the United States. While our data on cost are piecemeal (i.e., we were unable to locate a single source that encompassed all mental healthcare costs), the findings imply substantial financial expenditures.

AN OVERVIEW OF THE PREVALENCE OF PSYCHIATRIC DISORDERS

United States prevalence rates in the general population. Psychiatric disorders are surprisingly prevalent in the United States population. According to data from the

National Comorbidity Survey Replication study (2001–2003), 26.2 percent of Americans per year suffer from a diagnosable psychiatric disorder.[1] These same data indicate that the most prevalent psychiatric disorders during a 12-month period are anxiety disorders, such as generalized anxiety disorder and panic disorder (18.1%), followed by mood disorders, such as major depression and dysthymia (9.5%), and impulse-controlm disorders (8.9%).

According to statistics from this same survey, the lifetime prevalence of any diagnosable psychiatric disorder in the United States population is 46.4 percent.[2] From a lifetime perspective, the most common psychiatric disorders somewhat mirror those reported for the 12-month prevalence rates, with anxiety disorders being most common (28.8%), followed by impulse-control disorders (24.8%) and mood disorders (20.8%).[2] Note that, in the United States population, anxiety disorders are the most common psychiatric disorders from a 12-month as well as a lifetime perspective.

European prevalence rates in the general population. Some prevalence data for psychiatric disorders in Europe echo the high prevalence rates encountered in the United States. According to findings by Kringlen et al,[3] which were based on assessments during the 1990s, the 12-month and lifetime-prevalence rates of any psychiatric disorder in the Norwegian adult population are 32.8 and 52.4 percent, respectively—again, relatively similar to United States rates.

While these data were not reported according to general diagnostic groupings, depressive disorders, anxiety disorders, and alcohol abuse/dependence were most common (not necessarily in this order) for both 12-month and lifetime assessments. Data from the European Study of the Epidemiology of Mental Disorders (ESEMeD), which examined more than 20,000 adults in six countries (Belguim, France, Germany, Italy, the Netherlands, Spain), indicated that the 12-month and lifetime-prevalence rates for any psychiatric disorder in this collective sample were 11.5 and 25.9 percent, respectively.[4] In this international study, mood disorders and anxiety disorders were neck-and-neck in prevalence, both with rates at about 15 percent. Similar to United States data, mood and anxiety disorders were most common.

United States prevalence rates in primary care. In keeping with the high rates of psychiatric disorders encountered in community samples, there are also substantial prevalence rates of psychiatric disorders in primary care samples. For example, in a large United States study, Spitzer et al[5] used the PRIME-MD assessment in 1000 adult outpatients in four primary care clinics. They found that the point prevalence (i.e., the proportion of individuals with a given disorder at a particular time) of any psychiatric disorder was 26 percent; mood disorders were most common followed by anxiety and somatoform disorders. Note that this percentage for point prevalence is nearly identical to the 12-month prevalence rate reported for the United States general population.[1]

International prevalence rates in primary care. As for international studies undertaken in primary care settings, findings from a Danish study indicated that approximately one-half of the patients seen in primary care settings suffer from a current International Classification of Diseases, Tenth Edition (ICD-10) mental disorder. In this study, somatoform disorders demonstrated the highest prevalence rate (35.9%), followed by anxiety disorders (16.4%) and mood disorders (13.5%).[6]

Using the PRIME-MD assessment in a primary care population in Belgium, Anssea et al[7] found that threshold and subthreshold current psychiatric diagnoses were present in 42.5 percent of participants. Mood disorders were most common in this sample (31.0%), followed by anxiety disorders (19%) and somatoform disorders (18.0%).

In a French study[8] of more than 1,000 consecutive primary care patients, which also used the PRIMEMD assessment, current mood disorders were most common (16.5%), followed in frequency by anxiety disorders (13.5%) and alcohol-use disorders (11.3%).

According to Israeli data[9] that were based on four mental health assessment instruments in approximately 1,000 primary care patients in eight clinics, the most common threshold and subthreshold current psychiatric disorders were mood disorders (20.6%), disordered eating (15.0%), and somatization disorder (11.2%).

In a Spanish study[10] that examined all primary care consultations in the Madrid Regional Public Health System through computerized records during 2005 to 2006, 12.0 percent of participants were diagnosed with psychiatric disorder. In this study, anxiety disorders were most common, followed by mood disorders.

Finally, according to three-year Canadian billing data for the total adult population of the province of Alberta, 35 percent of primary care patients received the diagnosis of a psychiatric disorder from their physician. Again, anxiety disorders (21%) and mood disorders (16%) were most common.[11]

Clearly, the explicit prevalence rates for psychiatric disorders among various samples of primary care patients appear to vary from country to country. This variability is probably mediated somewhat by the methodology of the study. But, overall, it appears that roughly 25 to 30 percent of primary care patients have threshold or subthreshold psychiatric disorders, with the most common disorders generally being mood,

TABLE 1. Psychiatric disorders: facts and figures

In the United States general population, approximately one-quarter of individuals will suffer from a psychiatric disorder in a given year,[1] whereas nearly half will experience a psychiatric disorder at some point in their lifetimes.[2]
In the United States general population, the most common psychiatric disorders are anxiety disorders.[1,2]
According to European data, mood and anxiety disorders are the most common psychiatric diagnoses in the general population and share approximately equal prevalence rates.[4]
Both in the United States and Europe, the most common psychiatric disorders in primary care settings are mood and anxiety disorders as well as somatoform disorders. However, the individual percentages of the preceding disorders vary somewhat across studies.[5–11]

anxiety, and somatoform disorders. In some countries, eating disorders and alcohol-use disorders evidence a prominent presence. The highlights of these data are presented in Table 1.

THE COST OF PSYCHIATRIC DISORDERS

Treatment costs. From a practical perspective, it is genuinely challenging, if not impossible, to get an accurate accounting of the realistic cost for treatment of mental healthcare. Costs abound in various venues including direct-treatment costs, short-term and long-term disability payouts, lost days from work, reduced productivity at work, and unemployment. As expected, we were not able to locate a single global summary of this information, either for the United

States or any other country. However, the following piecemeal data give some insight into the costs of specific portions of the total bill for mental healthcare.

According to 2006 data from the United States Department of Health and Human Resources, the total cost for the treatment of psychiatric disorders in that year was $57,452,000,000. Medication costs accounted for 45 percent of the total cost, followed by outpatient visits (26%), inpatient days of hospitalization (14%), home healthcare (13%), and emergency room visits (1.6%).[12]

On a lesser scale, according to an analysis by a United States health plan located in the midwest, 10.7 percent of enrollees submitted a mental health claim. The cost of these claims accounted for 21.4 percent of the total expenditures for the health plan.[13]

As for examples of mental healthcare expenditures in other countries, in the United Kingdom, the total estimated cost in 2007 was just over 60 billion pounds, including direct service costs and lost earnings.[14] The high cost of mental healthcare is reflected in other European studies, as well. For example, according to data from the Netherlands during the reference year 2003, the annual per capita cost was €5,009 for mood disorders, €3587 for anxiety disorders, and €1431 for alcohol-related disorders.[15] These costs include payments by the health service, out-ofpocket payments, and production losses.

Disability costs. According to the National Institute of Mental Health, psychiatric disorders are the leading cause of disability for individuals ages 15 to 44 years of age in the United States and Canada.[16] Canadian data from the Great-West Life Assurance Company indicate that acute psychiatric disorders are the leading and secondary driver of long-term disability.[17] According to 2004 data from the Chartbook on Mental Health and Disability, 3.5 percent of the United States general population (noninstitutionalized), or about 6.7 million people, are disabled from mental disorders.[18] The Annual Statistical Report for the Social Security Disability Insurance Program for 2008 indicates that mental disorders, excluding mental retardation, account for 27.5 percent of all beneficiaries, with the greatest distribution being in the 50 to 59-year-old age group.[19] These data collectively indicate that the cost of psychiatric disorders, and the associated disability, is substantial.

CONCLUSIONS

According to available data, psychiatric disorders are relatively common in the general population and in primary care populations. Mood and anxiety disorders appear to dominate the diagnostic profile, but in primary care settings, somatization disorders are an additional diagnostic contender. While a substantially small portion of individuals suffer from serious mental illness, the costs of mental healthcare treatment are substantial, including the expenditures for treatment as well as disability. These latter findings behoove the psychiatric and psychological communities to continue to examine and engage in prevention strategies—i.e., to avidly pursue the various factors that cause mental disorders and to determine those that may be amenable to intervention. Otherwise, the prevalence rates of psychiatric disorders and their associated costs will likely continue to increase.

REFERENCES

1. Kessler RC, Chiu WT, Demler O, et al. Prevalence, severity, and comorbity of 12-month DSM-IV

disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry.* 2005;62:617–627.
2. Kessler RC, Berglund P, Demler O, et al. Lifetime prevalence and age-of onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry.* 2005;62:593–602.
3. Kringlen E, Torgersen S, Cramer V. A Norwegian psychiatric epidemiological study. *Am J Psychiatry.* 2001;158:1091–1098.
4. Alonso J, Lepine J-P. Overview of the key data from the European Study of the Epidemiology of Mental Disorders (ESEMeD). *J Clin Psychiatry.* 2007;68:3–9S.
5. Spitzer RL, Williams JBW, Kroenke K, et al. Utility of a new procedure for diagnosing mental disorders in primary care: the PRIME-MD 1000 study. *JAMA.* 1994;272:1749–1756.
6. Toft T, Fink P, Oernboel E, Christensen K, Frostholm L, Olesen F. Mental disorders in primary care: prevalence and co-morbidity among disorders. Results from the Functional Illness in Primary care (FIP) study. *Psychol Med.* 2005;35:1175–1184.
7. Anssea M, Dierick M, Buntinkx F, et al. High prevalence of mental disorders in primary care. *J Affect Disord.* 2004;78:49–55.
8. Norton J, De Roquefeuil G, Boulenger J-P, et al. Use of the PRIME-MD Patient Health Questionnaire for estimating the prevalence of psychiatric disorders in French primary care: comparison with family practitioner estimates and relationship to psychotropic medication use. *Gen Hosp Psychiatry.* 2007;29:285–293.
9. Cwikel J, Zilber N, Feinson M, Lerner Y. Prevalence and risk factors of threshold and sub-threshold psychiatric disorders in primary care. *Soc Psychiatry Psychiatr Epidemiol.* 2008;43:184–191.
10. Esteban-Vasallo MD, Dominguez-Berjon MF, Astray-Mochales J, et al. Epidemiological usefulness of population-based electronic clinical records in primary care: estimation of the prevalence of chronic diseases. *Fam Pract.* 2009;26:445–454.
11. Slomp M, Bland R, Patterson S, Whittaker L. Three-year physician treated prevalence rate of mental disorders in Alberta. *Can J Psychiatry.* 2009;54:199–202.
12. US Department of Health and Human Services. Center for Financing, Access and Cost Trends, Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 2006. http://www.meps.ahrq.gov/mepsweb/data_stats/tables_compendia_hh_interactive.jsp?_SERVICE=MEPSSocket0&_PROGRAM=MEPSPGM.TC.SAS&File=HCFY2006&Table=HCFY2006_CNDXP_C&_Debug. Accessed December 16, 2009.
13. Kathol RG, McAlpine D, Kishi Y, et al. General medical and pharmacy claims expenditures in users of behavioral health services. *J Gen Int Med.* 2005;20:160–167.
14. McCrone P, Dhanasiri S, Patel A, et al. Paying the Price. *The Cost of Mental Health Care in England to 2026.* London; King's Fund: 2008.
15. Smit F, Cuijpers P, Oostenbrink J, et al. Costs of nine common mental disorders: implications for curative and preventive psychiatry. *J Ment Health Policy Econ.* 2006;9:193–200.
16. National Institute of Mental Health. The numbers count: mental disorders in America. http://www.nimh.nih.gov/health/publications/the-numbers-count-mentaldisorders- in-america/index.shtml Accessed December 16, 2009.
17. Global Business and Economic Roundatable on Mental Health. Definition and prevalence rates of mental illness summary. http://mentalhealthroundtable.ca/20060328/Appendices.pdf Accessed December 16, 2009.
18. Jans L, Stoddard S, Kraus L. Chartbook on mental health and disability. http://www.infouse.com/disabilitydata/mentalhealth/1_2.php?print=yes Accessed December 16, 2009.
19. Social Security Administration. Annual statistical report on the Social Security Disability Insurance Program, 2008. http://www.socialsecurity.gov/policy/docs/statcomps/di_asr/ Accessedm December 16, 2009.

FUNDING: There was no funding for the development and writing of this article.

FINANCIAL DISCLOSURES: The authors have no conflicts of interest relevant to the content of this article.

AUTHOR AFFILIATIONS: Dr. R. Sansone is a professor in the Departments of Psychiatry and Internal Medicine at Wright State University School of Medicine in Dayton, Ohio, and Director of Psychiatry Education at Kettering Medical Center in Kettering, Ohio; Dr. L. Sansone is a family medicine physician (government service) and Medical Director of the Family Health Clinic at Wright-Patterson Air Force Base, WPAFB, in Dayton, Ohio. The views and opinions expressed in this column are those of the authors and do not reflect the official policy or the position of the United States Air Force, Department of Defense, or US government.

ADDRESS CORRESPONDENCE TO:
Randy A. Sansone, MD, Sycamore Primary Care Center, 2115 Leiter Road, Miamisburg, OH 45342; Phone: (937) 384-6850;
Fax: (937) 384-6938;
E-mail: Randy.sansone@khnetwork.org.